PROPOSAL EVALUATION

Proposition 1E Integrated Regional Water Management (IRWM) Grant Program

Stormwater Flood Management Grant, Round 2, 2013

Applicant	San Bernardino County Flood Control District	**Amount Requested**	$ 5,254,480
Proposal Title	Amethyst Basin Stormwater Flood Reduction Project	**Total Proposal Cost**	$10,508,960

PROJECT SUMMARY

The project constructs a stormwater capture and recharge basin in the Oro Grande Wash to capture and recharge up to 20% of the estimated peak flow runoff received by the wash during a 100-year storm event. The recharge basin is expected to provide increased flood protection to developed areas adjacent to the wash downstream from the basin.

PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	**9/15**	Technical Justification	**8/10**
Budget	**3/5**		
Schedule	**3/5**	Benefits and Cost Analysis	**21/30**
Monitoring, Assessment, and Performance Measures	**2/5**	Program Preferences	**5/10**
		Total Score (max. possible = 80)	**51**

EVALUATION SUMMARY

WORK PLAN

The criterion is less than fully addressed and documentation or rationales are incomplete or insufficient. Although the applicant has submitted 90% construction plans with the application, the construction tasks lack corresponding detail, and some essential subtasks are missing, such as for performance testing and site demobilization. The applicant indicates that CEQA is complete, and lists the environmental permits from State agencies that it has applied for; the applicant includes a task for mitigation required by the regional board but gives an inadequate description of why the mitigation is required. The attached CEQA document does not include references to water quality-related mitigation required for the project. This leaves the impression that the proposed mitigation task is for an unrelated project.

BUDGET

The budget for the project in the proposal has detailed cost information as described in Attachment 4, but not all costs appear reasonable and the supporting documentation for some of the budget categories of Exhibit B are not fully supported or lack detail. The applicant does not use task numbers and descriptions that are consistent with those used in the work plan. Also, the applicant shows expenditures to date, but some of these costs were incurred before September 30, 2008, and thus are ineligible as cost share.

SCHEDULE

The criterion is less than fully addressed and is not supported by thorough documentation or sufficient rationale. The tasks are not generally numbered consistently with the work plan tasks, and most of the subtasks are not consistent with the tasks and subtasks in the work plan. For Tasks 2 and 3 there are no actual dates shown for reporting. Task 5 is missing a subtask for assessment and evaluation included in the work plan. No tasks are shown for the development of financing or development of a Management Plan. It may have helped for the applicant to have provided a narrative description for how the Schedule was derived.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is marginally addressed and documentation is incomplete or insufficient. The applicant will assess the flood control performance using an established protocol used by SBCFCD, but the protocol does not discuss how measurement of rainfall intensity and water levels in the basin will be translated to an assessment of reduced flood risk downstream, which the applicant claims the project will achieve. The applicant provides a quantitative target for added recharge of 3,600 AF/year, but provides no description of the methods that will be used to track the actual quantity of recharge the project attains. No performance measures were included for other claimed benefits of the project, such as reduced number of structures flooded, preserved open space, and increased Mojave Squirrel habitat. The target provided for their main objective of reduced flood risk was “100% reduction in flood damages,” which is inconsistent with flood reduction maps provided in the applicant’s technical justification section, which show a less than 100% flood area reduction for all storm intensities.

TECHNICAL JUSTIFICATION

The proposal is technically justified to achieve the claimed benefits but not fully supported by documentation that demonstrates the technical adequacy of the project or physical benefits. The applicant provides five physical benefits. The flood related objectives, to reduce the flood hazard area, and to reduce the number of structures affected by flooding, are quantified and supported. Non-flood related benefits, though well described and quantified, are not supported. For example, the project objective of increased aquifer recharge, the applicant only provided estimates of how much additional recharge the proposed facility will provide, but provides no supporting documentation showing how this quantity of recharge for the project was determined.

COSTS AND BENEFITS ANALYSIS

Collectively the proposal is likely to provide a high level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

The net present value (NPV) of costs is $10.393 million. F-RAM estimates expected annual damages (EAD) savings (Actual) to be $1.55 million or $24.5 million NPV. In Table 11, however, EAD savings with the project are estimated to be only $436,108 or $6.9 million in NPV terms.

The F-RAM application assumes that the project has benefits because 1) the depth of water is reduced in all three events (1 in 10, 25, and 100 – years), and 2) the "probability of levee failure" is reduced to zero, in the 1 in 10 event, and to 60 percent, in the 1 in 25 year event. In the 1 in 100 year event, the analysis assumes that the "levee" fails either with or without the project, but the project still reduces damages because the area and depth of flooding is reduced. The FRAM analysis assumes that, with project, there is no damage in the 1 in 10 year event, and a 60 percent chance of damage in the 1 in 25 year event. In Table 11, the difference in EAD is based on the chance of failure only; the with and without-project damages for each event are the same except for the chance of failure. Table 11 doesn't count benefits resulting from reduced depth of water at all.

PROGRAM PREFERENCES

The applicant claims 13 Program Preferences and Statewide Priorities. The applicant demonstrates that three program preferences: 1) Include Regional Projects or Programs; 2) Efficiently Integrate Water Management Programs and Projects; 3) and Contribute to the Attainment of one or More of the CALFED Bay-Delta Program; and two statewide priorities: 1) Drought Preparedness and 2) Use and Reuse Water More Efficiently can be achieved with a high degree of certainty.